UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/721,048	11/20/2003	Steven Edward Klein	TUC920030150US1	5002

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KONRAD RAYNES & VICTOR, LLP.
ATTN: IBM37
315 SOUTH BEVERLY DRIVE, SUITE 210
BEVERLY HILLS, CA 90212

EXAMINER
KIM, JUNG W

ART UNIT	PAPER NUMBER
2132	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		Application No.	Applicant(s)
		10/721,048	KLEIN ET AL.
Office Action Summary		Examiner	Art Unit	
		Jung Kim	2132	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _06 September 2007_.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-30_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1,3,5-7,9-11,13,15-17,19-21,23,25-27,29 and 30_ is/are rejected.

7)☒ Claim(s) _2,4,8,12,14,18,22,24 and 28_ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

1.   This Office action is in response to the amendment filed on 9/6/07.

2.   Claims 1-30 are pending.

Response to Amendment

3.   The 101 rejections of claims 21-30 are withdrawn as the amendment overcomes

the 101 rejections.

Response to Arguments

4.   Applicant's arguments with respect to the prior art rejections have been fully

considered but they are not persuasive.

5.   With respect to applicant's arguments that McCarty does not disclose the

limitations of claims 1, 11 and 21, specifically, that McCarty does not disclose that the

another application layer login from the second port to the first port to establish a

second data path is subsequent to the sending of the application layer login from the

first port to the second port, applicant's argument is not persuasive. McCarty expressly

discloses bidirectional communication between two initiators in a computer system

compatible with the Fibre Channel Protocol. (col. 8:31-34; 8:41-9:32) In McCarty's

invention, one of the two initiators first sends a link layer login from a first port to a

second port (PLOGI)(by virtue of one of the initiators initiating communications before

the other initiator); and subsequent to the link layer login, the one of the two initiators

sends an application layer login from the first port to the second port to establish a first data path (PRLI). The second initiator subsequently sends a link layer login and then an application layer login from the second port to the first port to establish a second data path. McCarty, ibid. Hence, McCarty anticipates the limitations of claims 1, 11 and 21.

6.   With respect to applicant's arguments that McCarty does not disclose the limitations of claims 6, 16 and 26, applicant's arguments are not persuasive. As indicated above, McCarty discloses bidirectional communication between two initiators. (col. 8:31-34) In the invention of McCarty, a table at each initiator stores message type information to isolate the different response messages received from various other nodes. (fig. 4) Further, in a complete communication cycle between two initiators, each initiator establishes a first data path (plogi, prli), each initiator makes a determination that a data path is established between the other initiator and itself (communication on the data path), and following the determination, each initiator subsequently terminates their respective data path by sending an application layer logout (prlo). Hence, McCarty anticipates the limitations of claims 6, 16 and 26.

7.   For these reasons, application's arguments are not persuasive and claims 1, 3, 5-7, 9-11, 13, 15-17, 19-21, 23, 25-27, 29 and 30 remain rejected as being anticipated by McCarty.

Claim Rejections - 35 USC § 102

8.   Claims 1, 3, 5-7, 9-11, 13, 15-17, 19-21, 23, 25-27, 29 and 30 are rejected under

35 U.S.C. 102(b) as being anticipated by McCarty USPN 6,014,383 (hereinafter

McCarty).

9.   As per claim 11, McCarty discloses a system, comprising: a first port; a second

port coupled to the first port (fig. 4, reference nos. 510 and 515); means for sending a

link layer login from the first port to the second port (7:64-67; 8:22-23; 9:41-42); means

for sending an application layer login from the first port to the second port to establish a

first data path, wherein the first data path is from the first port to the second port (8:22-

26); and means for sending another application layer login from the second port to the

first port to establish a second data path, wherein the second data path is from the

second port to the first port. (8:22-26; 9:3-5 and lines 42-45)

10.   As per claim 13, McCarty discloses the system further comprising: means for

restricting the second port to sending the another application layer login to the first port

in response to determining that the second port has an initiated link layer login to the

first port, wherein restricting the second port causes a retention of the established first

data path from the first port to the second port, and wherein restricting the second port

and sending the another application layer login causes bidirectional data transfer to take

place between the first and second ports.

11.   As per claim 15, McCarty discloses the system further comprising: a first fibre

channel adapter coupled to the first port; a second fibre channel adapter coupled to the

second port; a first storage unit coupled to the first fibre channel adapter; a second

storage unit coupled to the second fibre channel adapter; one fibre channel link coupling

the first port and second port, wherein the one fibre channel link is associated with the

first and second data paths; and one or more bidirectional data transfer applications that

are implemented in the first and second fibre channel adapters, wherein the one or

more bidirectional data transfer applications may perform sending the link layer login,

the application layer login, and the another application layer login. (fig. 3b and 4; col.

5:54-67; 6:41-65; 8:21-41)

12.   As per claim 16, McCarty discloses a system, comprising: a first port; a second

port coupled to the first port (fig. 4, reference nos. 510 and 515); means for establishing

a first data path from the first port to the second port (col. 8:22-40); means for

determining, at the first port, whether the second port has a second data path

established from the second port to the first port (fig. 4, reference no. 512 and 517);

means for sending an application layer logout, from the first port to the second port, in

response to determining that the second port has the second data path established from

the second port to the first port (col. 7:67-8:1; 8:3; 9:41-44); and means for terminating

the first data path from the first port to the second port in response to receiving the

application layer logout at the second port. (9:46-53)

13.   As per claim 17, McCarty discloses wherein terminating the first data path from

the first port to the second port does not terminate the second data path from the

second port to the first port. Col. 9:42-45.

14.   As per claim 19, McCarty discloses the system further comprising: a first fibre

channel adapter coupled to the first port; a second fibre channel adapter coupled to the

second port; a first storage unit coupled to the first fibre channel adapter; a second

storage unit coupled to the second fibre channel adapter; one fibre channel link coupling

the first port and second port, wherein the one fibre channel link associated with the first

and second data paths; and one or more bidirectional data transfer applications that are

implemented in the first and second fibre channel adapters, wherein the one or more

bidirectional data transfer applications may perform establishing the first data path,

determining whether the second port has a second data path established, sending an

application layer logout, and terminating the first data path. (fig. 3b and 4; col. 5:54-67;

6:41-65; 8:21-41)

15.   As per claim 20, McCarty discloses wherein the application level logout is sent

via an application level logout frame, and wherein the first and second ports are capable

of sending and receiving a link level login frame, a link level logout frame, an application

level login frame and the application level logout frame over a fibre channel connection

coupling the first and second ports. (col. 7:60-8:4; 9:33-53)

16.   As per claim 21, McCarty discloses an article of manufacture, wherein the article

of manufacture is capable of causing operations, the operations comprising: sending a

link layer login from a first port to a second port (7:64-67; 8:22-23; 9:41-42);

subsequently, sending an application layer login from the first port to the second port to

establish a first data path, wherein the first data path is from the first port to the second

port (8:22-26); and subsequently, sending another application layer login from the

second port to the first port to establish a second data path, wherein the second data

path is from the second port to the first port. (8:22-26; 9:3-5 and lines 42-45)

17.   As per claim 23, McCarty discloses the operations further comprising: restricting

the second port to sending the another application layer login to the first port in

response to determining that the second port has an initiated link layer login to the first

port, wherein restricting the second port causes a retention of the established first data

path from the first port to the second port, and wherein restricting the second port and

sending the another application layer login causes bidirectional data transfer to take

place between the first and second ports. (col. 8:18-28 and lines 32-33; 8:41-9:31, 9:42-

45)

18.   As per claim 25, McCarty discloses the operations further comprising: wherein

the operations are performed by one or more bidirectional data transfer applications that

are implemented in first and second fibre channel adapters coupled to the first and

second ports respectively, wherein the first and second fibre channel adapters are

coupled to first and second storage controllers respectively, and wherein the first and

second ports are coupled via one fibre channel link associated with the first and second

data paths. (fig. 3b and 4; col. 5:54-67; 6:41-65; 8:21-41)

19.   As per claim 26, McCarty discloses an article of manufacture, wherein the article

of manufacture is capable of causing operations, the operations comprising:

establishing a first data path from a first port to a second port (col. 8:22-40);

determining, at the first port, whether the second port has a second data path

established from the second port to the first port (fig. 4, reference no. 512 and 517);

sending an application layer logout, from the first port to the second port, in response to

determining that the second port has the second data path established from the second

port to the first port (col. 7:67-8:1; 8:3; 9:41-44); and terminating the first data path from

the first port to the second port in response to receiving the application layer logout at

the second port. (9:46-53)

20.   As per claim 27, McCarty discloses wherein terminating the first data path from

the first port to the second port does not terminate the second data path from the

second port to the first port. Col. 9:42-45.

21.   As per claim 29, McCarty discloses wherein the operations are performed by one

or more bidirectional data transfer applications that are implemented in first and second

fibre channel adapters coupled to the first and second ports respectively, wherein the

first and second fibre channel adapters are coupled to first and second storage

controllers respectively, and wherein the first and second ports are coupled via one fibre

channel link associated with the first and second data paths. (fig. 3b and 4; col. 5:54-67;

6:41-65; 8:21-41)

22.   As per claim 30, McCarty discloses wherein the application level logout is sent

via an application level logout frame, and wherein the first and second ports are capable

of sending and receiving a link level login frame, a link level logout frame, an application

level login frame and the application level logout frame over a fibre channel connection

coupling the first and second ports. (col. 7:60-8:4; 9:33-53)

23.   As per claims 1, 3, 5-7, 9 and 10, they are method claims corresponding to

claims 11, 13, 15-17, 19-21, 23, 25-27, 29 and 30, and they do not teach or define

above the information claimed in claims 11, 13, 15-17, 19-21, 23, 25-27, 29 and 30.

Therefore, claims 1, 3, 5-7, 9 and 10 are rejected as being anticipated by McCarty for

the same reasons set forth in the rejections of claims 11, 13, 15-17, 19-21, 23, 25-27,

29 and 30.

Allowable Subject Matter

24.   Claims 2, 4, 8, 12, 14, 18, 22, 24 and 28 are objected to as being dependent

upon a rejected base claim, but would be allowable if rewritten in independent form

including all of the limitations of the base claim and any intervening claims.

Conclusion

25.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

Communications Inquiry

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Jung W. Kim whose telephone number is 571-272-3804.

The examiner can normally be reached on M-F 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

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you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

GILBERTO BARRON JR
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

Jung Kim
Examiner AU 2132